

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES
DEPARTMENT
OF AGRICULTURE

Radio Service

OFFICE OF
INFORMATION

HOMEMAKERS' CHAT

MONDAY, January 27, 1941

(FOR BROADCAST USE ONLY)

SUBJECT: "THE CARE AND FEEDING OF YEAST." Information from the Office of Experiment Stations, U.S.D.A.

--ooOoo--

A great many women bake their own bread today in spite of all the bread commercial bakeries sell. Over half of a group of typical farm housewives in Vermont recently reported that they made their bread instead of buying it. Some of them said they made bread for economy's sake. Others said their families preferred homemade bread. Housewives on isolated ranches in a State like Wyoming have still another reason for making bread. They live too far away from stores to buy bread. Every woman wants her bread to be good, that is her reason for making it. Bread may not actually be the staff of life, but she knows it goes a long way toward keeping her family satisfied and well-fed. What's more, some husbands and some children believe no food on earth is better than good fresh homemade bread.

You can see why food scientists at State experiment stations as far apart as Vermont and Wyoming have been investigating homemade bread. Emma Thiessen of the Wyoming Station reports many helpful points about bread-making that you won't find in your cookbook. She made a special study of yeast in homemade bread.

Yeast is much more of a problem to the housewife than the baker, she says. The baker always has fresh compressed yeast to use, and he has rooms for the bread to rise in--rooms where the heat and moisture are just right for the growth of yeast. But the housewife on a ranch or town far from town may not be able to get fresh compressed yeast for her twice-a-week bakings. Compressed yeast doesn't keep long in the ordinary refrigerator. She uses dry yeast cakes because they keep well, but they are slower. Fresh compressed yeast begins to grow the moment you mix it

with the lukewarm liquid, sugar and flour. Bread made with it is ready for the oven in 5 or 6 hours. But dry yeast cakes take 12 to 15 hours longer. The dry yeast has to "get going," so to speak, in an overnight sponge or starter before you mix the dough for its first rising.

Two ways of avoiding this traditional long and tiresome process, Miss Thiessen has found to work all right. One way is to use the new granulated dry yeast on the market which keeps many weeks in a tight mason jar in the refrigerator or cold cellar, and can be used just as you do compressed yeast. The other way to shorten the bread-making process is to buy compressed yeast, store it in a tight, moisture-proof container, and keep it frozen in the tray of your electric refrigerator. Freezing does not kill yeast as heat does. If you live in a northern State and have no electric refrigerator, you may even keep yeast frozen outdoors in winter.

The other foods you use in bread--the flour, salt, sugar and fat may all affect the growth of yeast.

As you know, hard-wheat flour is best for bread because it contains the most gluten. Gluten is the protein in flour that becomes elastic with kneading and mixing; holds the gas-bubbles given off by yeast, thus making the dough rise. The Wyoming study showed that hard-wheat flour makes lighter bread if it ages a few months in a warm, dry place. It is better kept in a tight tin box than in sacks of cloth or paper.

Sugar in bread feeds the yeast and also gives flavor and a golden-brown crust to the bread. Use more sugar in long-process than in short-process bread.

Salt adds to the taste of the bread and prevents certain bacteria from growing in the dough. But too much salt slows up the growth of the yeast. About one teaspoon of salt for each pound of bread is right. Use a little more salt in whole wheat bread.

Fat in bread makes it tender. Most farm housewives use a little melted lard in the dough. Be sure the fat is cooled to lukewarm before it goes in with the yeast and flour.

As for the liquid in the dough, that can be water, milk, potato-water for dry yeast, or even whey. Miss Thiessen found that water which is slightly hard helps strengthen the gluten, but very hard water toughens it. Use part milk if the water is very hard. Equal parts milk and water make a lighter loaf than all milk or all hard water.

Now a point or two about rising and baking. Yeast grows best, and dough becomes lightest at the temperature known as lukewarm. This is 80 to 85 degrees Fahrenheit--the warmth of a warm but not a hot room. Miss Thiessen believes women usually keep dough too warm, and kill some of the yeast. They are likely to think lukewarm is anywhere up to 110 degrees. A moderately cool dough makes better bread than over-heated dough. In hot summer dough may rise better if it stands in a pan of cool water. A suggestion from the Vermont station for making bread in winter is to let the dough rise in a well-insulated box or cupboard surrounded with jars of hot water to be sure it is warm enough.

Most recipes say to let the dough rise until it doubles in bulk. Miss Thiessen reports better bread if the dough rises to 3 times its bulk. But too much of a rise ends in a fall and makes bread crumbly or porous on top.

As for baking, Miss Tiessen advises a hot oven for the first 10 to 15 minutes to check the growth of yeast and stop the bread from rising; then moderate heat to finish baking. She finds that a gas oven needs to be hotter for bread than the oven in a coal or wood range.

Perhaps these points about the care of yeast in bread may help you in making bread for your family.

